

COMMON SYSTEMS OF WEIGHTS AND MEASURES

METRIC SYSTEM

Metric weight	Metric liquid measure
1 femtogram (fg) = 0.001 pg	1 femtoliter (fL) = 0.001 pL
1 picogram (pg) = 0.001 ng	1 picoliter (pL) = 0.001 nL
1 nanogram (ng) = 0.001 μg	1 nanoliter (nL) = 0.001 μL
1 microgram (μg) = 0.001 mg	1 microliter (μL) = 0.001 mL
1 milligram (mg) = 0.001 g	1 milliliter (mL) = 0.001 L
1 centigram (cg) = 0.01 g	1 centiliter (cL) = 0.01 L (10 mL)
1 decigram (dg) = 0.1 g	1 deciliter (dL) = 0.1 L (100 mL)
1 gram (g) = 1 g	1 liter (L) = 1 L (1000 mL)
1 dekagram (dag) = 10 g	1 dekaliter (daL) = 10 L
1 hectogram (hg) = 100 g	1 hectoliter (hL) = 100 L
1 kilogram (kg) = 1000 g	1 kiloliter (kL) = 1000 L

APOTHECARY SYSTEM*

Apothecary weight equivalents	Apothecary volume equivalents
1 grain† (gr) = 1 gr	1 minim (℥) = 1 ℥
1 scruple (ʒ) = 20 gr	1 fluidram (fʒ) = 60 ℥
1 dram (ʒ) = 60 gr = 3 ʒ	1 fluid ounce (fʒ) = 480 ℥ = 8 fʒ
1 ounce (ʒ) = 480 gr = 8 ʒ	1 pint (pt or 0) = 7680 ℥ = 16 fʒ
1 pound (lb) = 7680 gr = 16 ʒ	1 quart (qt) = 15360 ℥ = 32 fʒ
	1 gallon (gal or cong) = 61440 ℥ = 128 fʒ

* Apothecary—used in preparation of pharmaceuticals.

† The grain in each of the above systems has the same value and thus serves as a basis for the interconversion of the other units.

AVOIRDUPOIS SYSTEM*†

Avoirdupois equivalents
1 ounce (oz) = 437.5 grains (gr)
1 pound (lb) = 16 ounces (oz) = 7000 grains (gr)

*† Avoirdupois is used by manufacturers and wholesalers.